<u>Amendments of the Claims</u>

The following listing of claims will replace all prior versions, and listings, of claims in the above-identified patent application:

<u>Listing of Claims</u>

1. (currently amended)   A method for analyzing price data, representing price in a financial system that varies over time, said method comprising:

beginning at a first initial moment, acquiring
5   said price data <u>at a processor</u> during an initial first duration and determining <u>using said processor</u> an initial first range of said price data between a minimum value during said initial first duration and a maximum value during said initial first duration;

10   beginning at said first initial moment, acquiring said price data <u>at said processor</u> during an initial second duration of which said initial first duration is a multiple and determining <u>using said processor</u> an initial second range of said price data between a minimum value during
15   said initial second duration and a maximum value during said initial second duration;

forming<u>, using said processor,</u> a ratio of said initial first range of said price data during said initial first duration to said initial second range of said price data
20   during said initial second duration;

when said ratio exceeds a square root of said multiple, concluding<u>, using said processor,</u> that said system is varying in a trend; and

when said ratio is less than said square root
25   of multiple, concluding<u>, using said processor,</u> that said system is congesting.

2. (cancelled)

3. (previously presented)   The method of claim 1
further comprising, after said acquiring and before said
comparing, applying bootstrapping techniques to said price
data.

4-5. (cancelled)

6. (currently amended)   The method of claim 1
further comprising:

beginning at a subsequent initial moment,
acquiring said price data at said processor during a
5 subsequent first duration and determining, using said
processor, a subsequent first range of said price data between
a minimum value during said subsequent first duration and a
maximum value during said subsequent first duration;

beginning at said subsequent initial moment,
10 acquiring said price data at said processor during a
subsequent second duration of which said subsequent first
duration is said multiple and determining, using said
processor, a subsequent second range of said price data
between a minimum value during said subsequent second duration
15 and a maximum value during said subsequent second duration;

computing, using said processor, a ratio of
said subsequent first range to said subsequent second range;
and

comparing, using said processor, said ratio of
20 said subsequent first range to said subsequent second range to
said multiple, and determining from said comparison of said
ratio to said multiple, using said processor, how said system
is varying.

7. (currently amended)   The method of claim 6
further comprising repeating, at respective multiple
additional subsequent initial moments:

acquiring said price data <u>at said processor</u>
5   during each respective subsequent first duration;
acquiring said price data <u>at said processor</u>
during each respective subsequent second duration;
computing<u>, using said processor,</u> a respective
ratio of each respective subsequent first range to each
10   respective subsequent second range;
comparing<u>, using said processor,</u> each
respective ratio of each respective subsequent first range to
each respective subsequent second range to said multiple to
obtain a respective comparison; and
15   determining from said respective comparisons<u>,</u>
<u>using said processor,</u> how said system is varying.

8. (previously presented)   The method of claim 7
wherein, for each of said initial moments:
said comparing said respective ratio to said
multiple, and said determining, comprise:
5   when said respective ratio exceeds a square
root of said multiple, concluding that said system is varying
in a trend, and
when said respective ratio is less than said
square root, concluding that said system is congesting.

9. (currently amended)   The method of claim 8
further comprising comparing<u>, using said processor,</u> respective
ones of said ratio for two consecutive ones of said initial
moments and:
5   when each of said respective ones of said ratio
exceeds a square root of said multiple and a subsequent
respective one of said ratio exceeds a prior respective one of
said ratio, concluding<u>, using said processor,</u> that said system
is varying in a trend and said trend is accelerating;
10   when each of said respective ones of said ratio
exceeds said square root and a prior respective one of said

4

ratio exceeds a subsequent respective one of said ratio,
concluding, using said processor, that said system is varying
in a trend and said trend is decelerating;

15   when each of said respective ones of said ratio
is less than said square root and a prior respective one of
said ratio exceeds a subsequent respective one of said ratio,
concluding, using said processor, that said system is
congesting and said congestion is accelerating;

20   when each of said respective ones of said ratio
is less than said square root and a subsequent respective one
of said ratio exceeds a prior respective one of said ratio,
concluding, using said processor, that said system is
congesting and said congestion is decelerating;

25   when a prior respective one of said ratio is
less than said square root and a subsequent respective one of
said ratio exceeds said square root, concluding, using said
processor, that said system has moved from congestion into a
trend; and

30   when a prior respective one of said ratio
exceeds said square root and a subsequent respective one of
said ratio is less than said square root, concluding, using
said processor, that said system has moved from a trend into
congestion.

        10. (currently amended) The method of claim 9
further comprising:

        when said system is in a current condition of
congestion or trend, comparing, using said processor,
5   respective ones of said ratio for three consecutive respective
ones of said initial moments separated by equal time
intervals; and

        deriving, using said processor, from said
comparison of said respective ones of said ratio for three
10 consecutive respective ones of said initial moments, a
prediction of when said system will move from said current

condition of congestion or trend to another condition of
congestion or trend.

11. (previously presented)   The method of claim 10
further comprising displaying said prediction in the form of a
closed curve with price data points from said three
consecutive respective ones of said initial moments identified
on said closed curve.

12. (previously presented)   The method of claim 1
further comprising displaying said initial first range of said
price data and said expected range of said price data.

13. (original) The method of claim 12 wherein said
displaying comprises displaying a line graph.

14. (original) The method of claim 12 wherein said
displaying comprises displaying an orbital plot.

15-20. (cancelled)

21. (currently amended)   The method of claim 7
further comprising repeating, at multiple additional sets of
multiple initial moments:
        said acquiring said price data at said
processor during each respective subsequent first duration;
        said computing, using said processor, a
respective actual range of said price data between a minimum
value during each respective subsequent first duration and a
maximum value during each respective subsequent first
duration;
        said computing, using said processor, a
respective ratio of each respective subsequent first range to
each respective subsequent second range;
        said comparing, using said processor, each
respective ratio of each respective subsequent first range to

each respective subsequent second range to said multiple to obtain a respective comparison; and

   said determining from said respective comparisons, using said processor, how said system is varying;
20 wherein:

   said duration differs for each said set.

   22. (previously presented)   Apparatus for analyzing price data, representing price in a financial system that varies over time, said apparatus comprising:

   means for, beginning at a first initial moment,
5 acquiring said price data during an initial first duration and determining an initial first range of said price data between a minimum value during said initial first duration and a maximum value during said initial first duration;

   means for, beginning at said first initial
10 moment, acquiring said price data during an initial second duration of which said initial first duration is a multiple and determining an initial second range of said price data between a minimum value during said initial second duration and a maximum value during said initial second duration;

15   means for forming a ratio of said initial first range of said price data during said initial first duration to said initial second range of said price data during said initial second duration;; and

   means for concluding:

20   when said ratio exceeds a square root of said multiple, that said system is varying in a trend; and

   when said ratio is less than said square root of multiple, that said system is congesting.

   23-26. (cancelled)

   27. (previously presented)   The apparatus of claim 22 further comprising:

means for, beginning at a subsequent initial moment, acquiring said price data during a subsequent first duration and determining a subsequent first range of said price data between a minimum value during said subsequent first duration and a maximum value during said subsequent first duration;

means for, beginning at said subsequent initial moment, acquiring said price data during a subsequent second duration of which said subsequent first duration is said multiple and determining a subsequent second range of said price data between a minimum value during said subsequent second duration and a maximum value during said subsequent second duration;

means for computing a ratio of said subsequent first range to said subsequent second range; and

means for comparing said ratio of said subsequent first range to said subsequent second range to said multiple, and determining from said comparison of said ratio to said multiple how said system is varying.

28. (previously presented) The apparatus of claim 22 further comprising means for displaying said ratio of said initial first range of said price data to said initial second range of said price data and said multiple.

29. (original) The apparatus of claim 28 wherein said displaying means displays a line graph.

30. (original) The apparatus of claim 28 wherein said displaying means displays a orbital plot.

31-34. (cancelled)

35. (currently amended) Apparatus for analyzing price data, representing price in a financial system that varies over time, said apparatus comprising:

a data feed that, beginning at a first initial
moment, acquires said price data during an initial first
duration, and beginning at said first initial moment, acquires
said price data during an initial second duration of which
said initial first duration is a multiple; and

a processor programmed with instructions to
determine an initial first range of said price data between a
minimum value during said initial first duration and a maximum
value during said initial first duration and instructions to
determine an initial second range of said price data between a
minimum value during said initial second duration and a
maximum value during said initial second duration; wherein
said instructions comprise:

instructions to form ratio of said initial
first range to said initial second range; and

instructions to conclude:
that said system is varying in a trend when
said ratio exceeds a square root of said multiple, and
that said system is congesting when said ratio
is less than said [[said]] square root of said multiple.

36. (cancelled)

37. (previously presented)   The apparatus of
claim 35 wherein said processor applies bootstrapping
techniques to said acquired price data.

38-39. (cancelled)

40. (previously presented)   The apparatus of
claim 38 wherein:
said data feed, beginning at a subsequent
initial moment, acquires said price data during a subsequent
first duration;
said instructions comprise instructions to
determine a subsequent first range of said price data between

a minimum value during said subsequent first duration and a
maximum value during said subsequent first duration;

10   said data feed, beginning at said subsequent
initial moment, acquires said price data during a subsequent
second duration of which said subsequent first duration is
said multiple;

          said instructions comprise instructions to
15 determine a subsequent second range of said price data between
a minimum value during said subsequent second duration and a
maximum value during said subsequent second duration; and

          said instructions comprise instructions to
compute a ratio of said subsequent first range to said
20 subsequent second range, to compare said ratio to said
multiple, and to determine from said comparison how said
system is varying.

          41. (previously presented)   The apparatus of
claim 35 further comprising a display that displays said ratio
of said initial first range of said price data to said initial
second range of said price data and said multiple.

          42. (original) The apparatus of claim 41 wherein
said display displays a line graph.

          43. (original) The apparatus of claim 41 wherein
said display displays a orbital plot.

          44-47. (cancelled)

          48. (previously presented)   A method for analyzing
price data, representing price in a financial system that
varies over time, said method comprising:

          beginning at an initial moment, acquiring said
5 price data during a duration of a first length of time and
determining a first range of said price data between a minimum
value during said duration of said first length of time and a

maximum value during said duration of said first length of time;

10   determining a second range of said price data during a duration of a second length of time beginning at said initial moment, said duration of said second length of time being a multiple of said duration of said first length of time, said second range being a product of said first range

15 and a square root of said multiple; and

                monitoring an instantaneous value of said price data during said duration of said second length of time and determining that said system is varying in a trend when said instantaneous value is outside said second range.

       49-51. (cancelled)

       52. (previously presented)   Apparatus for analyzing price data, representing price in a financial system that varies over time, said apparatus comprising:

                means for, beginning at an initial moment,

5 acquiring said price data during a duration of a first length of time and determining a first range of said data between a minimum value during said duration of said first length of time and a maximum value during said duration of said first length of time;

10   means for determining a second range of said price data during a duration of a second length of time beginning at said initial moment, said duration of said second length of time being a multiple of said duration of said first length of time, said second range being a product of said

15 first range and a square root of said multiple; and

                means for monitoring an instantaneous value of said price data during said duration of said second length of time and determining that said system is varying in a trend when said instantaneous value is outside said second range.

53-55. (cancelled)

56. (previously presented)   Apparatus for analyzing price data, representing price in a financial system that varies over time, said apparatus comprising:

a data feed for, beginning at an initial moment, acquiring said price data during a duration of a first length of time and monitoring an instantaneous value of said price data during a duration of a second length of time beginning at said initial moment; and

a processor programmed with instructions to:

determine a first range of said price data between a minimum value during said duration of said first length of time and a maximum value during said duration of said first length of time,

determine a second range of said price data during said duration of said second length of time beginning at said initial moment, said duration of said second length of time being a multiple of said duration of said first length of time, said second range being a product of said first range and a square root of said multiple, and

determine that said system is varying in a trend when said instantaneous value is outside said second range.

57-59. (cancelled)

60. (withdrawn)   A method for offering to subscribers analysis of data that vary over time, said method comprising:

beginning at each of a plurality of initial moments, acquiring said data during a plurality of respective first durations;

dividing said data into respective portions, each of said respective portions including data for one or more of said plurality of respective first durations;

10 transmitting said data to respective computers operated by at least some of said subscribers at the option of each individual subscriber;

determining at each said respective computer, for each respective first duration in said respective data 15 portion a respective first range of said data between a minimum value during said respective first duration and a maximum value during said respective first duration;

determining at each said respective computer, for each respective first duration in said respective data 20 portion a respective expected range of said during said respective first duration;

collecting said respective determinations of said respective computers;

comparing each respective range of said data 25 during each respective first duration to each respective expected range of said data during said respective first duration; and

transmitting said comparison to said subscribers.

61. (withdrawn)   The method of claim 60 further comprising charging a respective subscription fee to each of said subscribers, said respective subscription fee being lower for a subscriber among said at least some of said subscribers 5 than for a subscriber outside said at least some of said subscribers.

62. (withdrawn)   The apparatus of claim 56 wherein said system is a biological system and said data are biological data.

63. (withdrawn)   The apparatus of claim 56 wherein said system is a meteorological system and said data are meteorological data.

64. (withdrawn)   The apparatus of claim 52 wherein said system is a biological system and said data are biological data.

65. (withdrawn)   The apparatus of claim 52 wherein said system is a meteorological system and said data are meteorological data.

66. (withdrawn)   The method of claim 48 wherein said system is a biological system and said data are biological data.

67. (withdrawn)   The method of claim 48 wherein said system is a meteorological system and said data are meteorological data.

68. (withdrawn)   The apparatus of claim 35 wherein said system is a biological system and said data are biological data.

69. (withdrawn)   The apparatus of claim 35 wherein said system is a meteorological system and said data are meteorological data.

70. (withdrawn)   The apparatus of claim 22 wherein said system is a biological system and said data are biological data.

71. (withdrawn)   The apparatus of claim 22 wherein said system is a meteorological system and said data are meteorological data.

72. (withdrawn)   The method of claim 1 wherein said system is a biological system and said data are biological data.

73. (withdrawn)   The method of claim 1 wherein said system is a meteorological system and said data are meteorological data.